

California Department of Fish and Game State Fish Hatcheries

Headquarters
California Department of Fish and Game
Lands and Facilities Branch
1416 9th Street, Sacramento, CA 95814

◆ SALMON AND STEELHEAD HATCHERIES

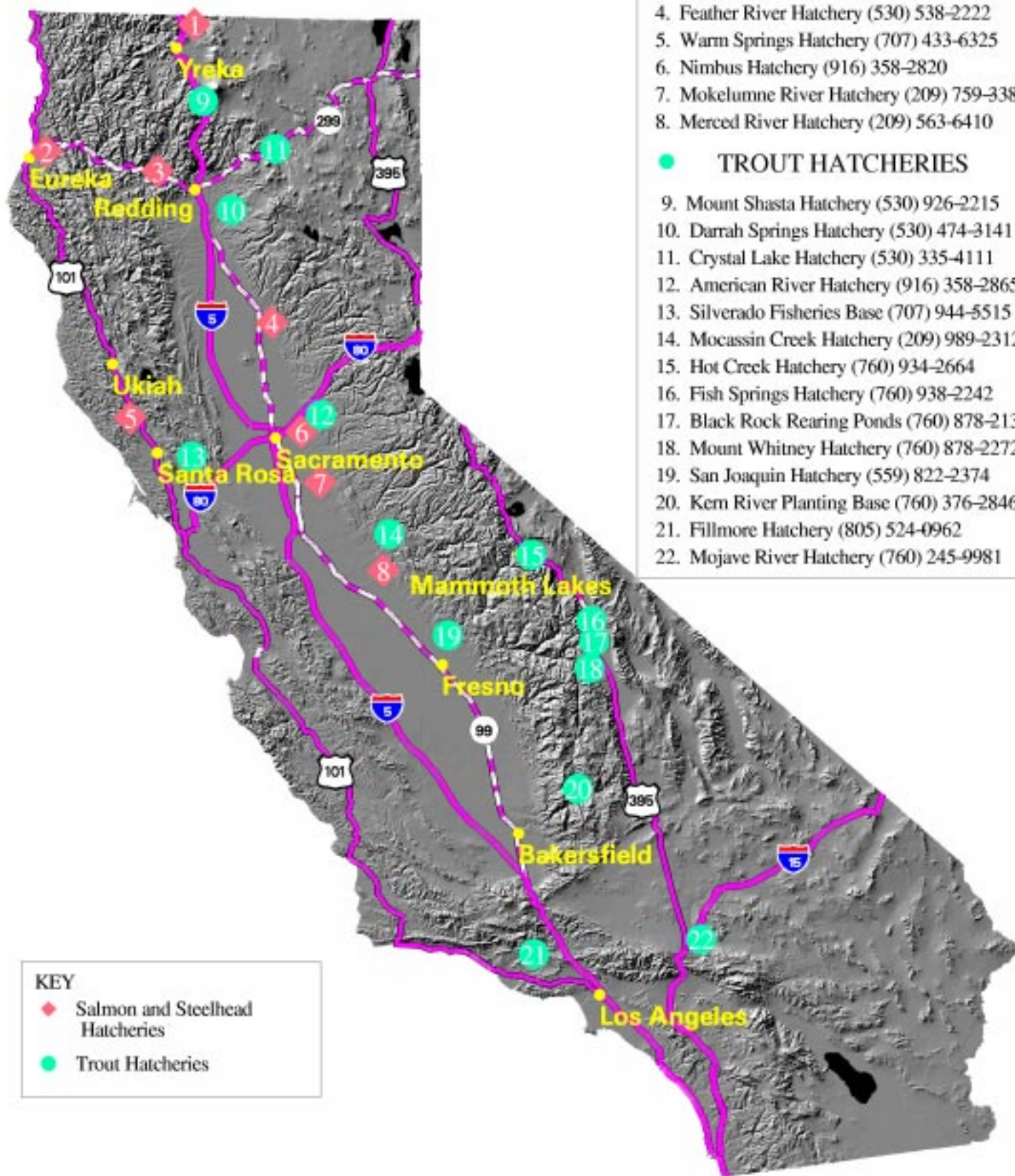
1. Iron Gate Hatchery (530) 475-3420
2. Mad River Hatchery (707) 822-0592
3. Trinity River Hatchery (530) 778-3931
4. Feather River Hatchery (530) 538-2222
5. Warm Springs Hatchery (707) 433-6325
6. Nimbus Hatchery (916) 358-2820
7. Mokelumne River Hatchery (209) 759-3383
8. Merced River Hatchery (209) 563-6410

● TROUT HATCHERIES

9. Mount Shasta Hatchery (530) 926-2215
10. Darrah Springs Hatchery (530) 474-3141
11. Crystal Lake Hatchery (530) 335-4111
12. American River Hatchery (916) 358-2865
13. Silverado Fisheries Base (707) 944-5515
14. Mocassin Creek Hatchery (209) 989-2312
15. Hot Creek Hatchery (760) 934-2664
16. Fish Springs Hatchery (760) 938-2242
17. Black Rock Rearing Ponds (760) 878-2131
18. Mount Whitney Hatchery (760) 878-2272
19. San Joaquin Hatchery (559) 822-2374
20. Kern River Planting Base (760) 376-2846
21. Fillmore Hatchery (805) 524-0962
22. Mojave River Hatchery (760) 245-9981

KEY

- ◆ Salmon and Steelhead Hatcheries
- Trout Hatcheries



CALIFORNIA'S FISH HATCHERY AND PLANTING PROGRAM

Hatcheries—An Important Tool of Fisheries Management

The Department of Fish and Game operates 12 trout hatcheries, eight salmon and steelhead hatcheries and two fish planting bases. Fish culture is essentially underwater farming of a most fascinating sort. Like other types of farming, it is subject to the vagaries of weather and disease.

TROUT HATCHERIES

California trout hatcheries are among the most modern and efficient in the world today. They are capable of producing 13,000,000 fingerling, 2,000,000 subcatchable, and 10,000,000 catchable-sized trout annually.

Trout hatcheries must be located near an abundant source of good, cool water. Nearness to the streams planted is desirable but not essential in these days of modern transportation.

The chain of life passing through the hatcheries and into the state's lakes and streams begins with the egg-taking process. Most of California trout eggs are taken from brood fish reared at Mt. Whitney, Hot Creek, and our Mt. Shasta hatcheries.

Although most of the trout produced are rainbows, several different strains are maintained to provide eggs at different times of the year, as required by the production hatcheries.

Although rainbow trout normally spawn in the spring, fast-growing strains that spawn in the fall have been developed by selective breeding. Eggs taken from these strains in the fall become 10-inch trout ready to stock the next summer, eight or nine months later.

Air pressure expels eggs from a ripe female into a salt solution and then the milt from the male is added to fertilize them. They are hatched in incubator cabinets or in hatching jars supplied with cold running water. The fry are retained in the incubators or hatching jars until the yolk sac, which is their only food during this period, is absorbed. At this stage they are ready to swim and begin to eat. They are released into troughs or rearing ponds and fed finely powdered, dry food. As the trout grow, they are sorted for size to minimize cannibalism and the size of their food is increased to pellets of dry food.

The nearly 8,000,000 fingerlings stocked each year are planted mainly by airplane in wilderness lakes and by truck in large coldwater reservoirs in the mountains. Many trout lakes provide ideal growing conditions for trout, but present little or no opportunity for spawning. Rainbow trout and brown trout spawn only in streams while brook trout can often spawn successfully in the bottom of a lake, if springs are present. The DFG has established self-maintaining populations of brook trout in many parts of the Sierra, thus avoiding the need to plant these lakes every year. Others, where trout cannot spawn, are regularly stocked by plane with small fry, seeding the lake much as a farmer would seed crop land. In this way, fishing can be provided quite cheaply in many lakes where otherwise there would be none.

The department stocks a few fingerling trout in streams

which have been damaged by forest fire, siltation, or pollution, and sometimes brown trout are planted in streams to establish them where they had not been before. However, in general, it is economically infeasible to stock fingerlings in streams, because returns to anglers are usually only about one or two percent. That makes it very costly to put a trout in the creel. The environment is much less rigorous for trout in lakes, and fingerling survival is substantially higher than in streams.

In general, requirements for subcatchable trout have priority over catchable-sized trout. This policy was adopted because experience has shown that trout five or six inches long can be planted in the fall and allowed to grow in the lake until the season opens the following spring. These fish can be used in lakes which provide unusually good conditions for growth and survival.



Catchable rainbow trout for California anglers.

The catchable trout program looms large in California's total angling picture. It supports about 7,500,000 fishing days per year. Although it is not known exactly how many angler days are spent fishing for trout in California each year, from statewide surveys based on angler questionnaires, it is estimated to be in excess of 50,000,000 days per year. Catchable-sized trout appear to be supporting more than one-third of all trout angling in the state.

Heavily fished roadside waters form a major category in

the catchable-sized trout stocking program. They require frequent, sometimes weekly, plants of catchable-sized trout. Perhaps the most significant feature of catchable trout water – and one which is commonly overlooked – is that anglers catch from it many times the natural crop of fish each year. Generally speaking, anglers catch a surprisingly large percentage of the catchable trout stocked in small, heavily-fished streams. In many of these streams, most of the fish are harvested within the first week after planting. Larger streams under lighter pressure give somewhat slower and lower returns, although most of the fish are still caught.

Planting schedules are based on water conditions and the availability of satisfactory fishing opportunities. Many waters throughout the state are stocked for year-round fishing, while others have a limited season due to low or warm water in the midsummer months. Some waters in or near large urban areas are stocked to provide recreation for many anglers who cannot travel to distant locations.

The planting process is one of the most critical phases of a trout's existence on its way to the angler's creel. Water in the tank truck must be kept cool and well aerated on the trip from hatchery to a lake or stream, which may be as long as 300 miles and may last 16 hours. For these long trips, 2,500-gallon diesel powered trailer tank trucks are used. For intermediate trips, 600- and 1,200-gallon tankers are used. However, the real workhorse of the planting fleet is the 150-400 gallon tank mounted on flatbed pickup trucks. Two to four catchable trout can be transported safely in each gallon of water.

SALMON AND STEELHEAD HATCHERIES



Chinook salmon.

Eight hatcheries in the state's system are devoted to salmon and steelhead production. Nimbus Hatchery, on the American River, and Trinity River Hatchery, near Lewiston, were built by the U.S. Bureau of Reclamation. This was to make up for the loss of salmon and steelhead spawning areas that were cut off by construction of dams. Both are operated by the DFG, at the Bureau's expense.

The Feather River Hatchery, near Oroville, was built by the Department of Water Resources (DWR). It replaces spawning grounds blocked by Oroville Dam, and is operated by DFG. Iron Gate Hatchery, on the Klamath River, near Hornbrook, is financed by Pacific Power and Light Co., and operated by DFG.

Mad River Hatchery, near Arcata, was built by the DFG, and is supported by fishing license sales. Mokelumne River Hatchery, east of Lodi, was built and is funded by the East Bay Municipal Utility District, to make up for spawning grounds cut off by Camanche Dam. Warm Springs Hatchery, on Dry Creek, near Geyserville, is operated by DFG under an agreement with the U.S. Army Corps of Engineers.

In addition to the fish produced at state-operated salmon hatcheries for mitigation, commercial salmon fishermen — through the salmon stamp program — finance the production of four million Chinook salmon each year, for ocean fishing enhancement.

Salmon culture in hatcheries is similar to trout culture, except that, since salmon die after spawning, they are killed at spawning time. Most of the King salmon are planted as small fingerlings. They migrate to the sea, and return in two to five years as mature adults. Some Chinook and Coho salmon are reared to one year of age, before being released.

FINANCING

The DFG trout planting program is financed by the sales of fishing license and stamps. In addition to fish production, sales revenues are used to pay part of the cost of fisheries management, law enforcement, fisheries research, and administrative overhead. The DFG attempts to stock each lake and stream with the size and species of fish that will provide the best fishing with the funds available.

HATCHERIES

Name	County	Nearest Town
American River	Sacramento	Rancho Cordova
Black Rock Rearing Ponds	Inyo	Independence
Crystal Lake	Shasta	Burney
Darrah Springs	Shasta	Red Bluff
Feather River	Butte	Oroville
Fillmore	Ventura	Fillmore
Fish Springs	Inyo	Big Pine
Hot Creek	Mono	Bishop
Iron Gate	Siskiyou	Hornbrook
Kern River Planting Base	Kern	Kernville
Mad River	Humboldt	Arcata
Merced River Spawning Channel	Merced	Snelling
Moccasin Creek	Tuolumne	Sonora
Mojave River	San Bernardino	Victorville
Mokelumne River Fish Installation	San Joaquin	Clements
Mt. Shasta	Siskiyou	Mt. Shasta
Mt. Whitney	Inyo	Independence
Nimbus	Sacramento	Rancho Cordova
San Joaquin	Fresno	Friant
Trinity River	Trinity	Lewiston
Warm Springs	Sonoma	Geyserville
Silverado Fisheries Base	Napa	Yountville

CALIFORNIA TROUT

Following are the most popular California trout. All of these are propagated to some extent in Department of Fish and Game hatcheries.

Rainbow Trout - Native of California, found in nearly all lakes and streams where water temperatures do not exceed 70°F for any length of time. Dark, bluish-green back, black spots on back and tail, red stripe on sides, silvery belly. Spawns on gravel bars in fast, clear water. Most suitable of all trout for artificial propagation and highly regarded as a game fish for its fighting qualities.

Brook - Native of Atlantic coastal area, found in many mountain lakes and spring-fed streams throughout the state. Dark olive, worm-like lines on back and sides, red spots along sides, belly reddish-orange to lemon, lower fins red, with white tips. Well suited to hatchery production. Unlike other species, it may spawn in shallow areas of lakes having spring seepage.

Brown - A native of Europe, generally the hardest of California inland trout to catch. Plentiful in many Sierra streams and scattered elsewhere throughout the State. The record fish in California weighed 25 pounds. Dark brown on back with black spots, shading to light brown with red spots on sides. The only trout with both black and red spots on its body.

Cutthroat - A native of California, one subspecies found in coastal streams from Eel River in Humboldt County northward, and the other in the lakes and streams of the central Sierra eastern slopes. Dark olive on back, blending to lighter olive and silver on sides and belly, black spots on back, sides and tail; brilliant red slash-like area on throat.

Golden - State fish of California, the golden trout is native to the high country of the Kern River watershed, and now is found in many lakes and streams in the Sierra from Mt. Whitney north to Alpine County. Medium olive back, shading down the sides to brilliant golden belly and reddish-orange stripes from head to tail, crossed with olive vertical bars. Lower fins golden-orange.

Fish Planting Information

The Department maintains recorded messages listing weekly trout plants in each region. Call for current information in your area. We are currently developing a list of planted waters with directions to them.

Region 1, **Northern California - North Coast Region** 530 225-2146

Region 2, **Sacramento Valley - Central Sierra Region** 916 351-0832

Region 3, **Central Coast Region** / San Francisco Bay Area 707 944-5581

Region 4, **San Joaquin Valley-Southern Sierra Region** 559 243-4005 x-183

Regions 5 & 6, **South Coast and Inland Deserts Region** 562 590-5020